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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,850	12/09/2003	John Geoffrey Chan	9080R	5238
45980 7590 05/21/2007 CHURCH & DWIGHT CO., INC. LAW DEPT. - PATENTS 469 NORTH HARRISON STREET PRINCETON, NJ 08543-5297			EXAMINER CHIN, RANDALL E	
			ART UNIT 1744	PAPER NUMBER
			MAIL DATE 05/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/730,850

Applicant(s)

CHAN, JOHN GEOFFREY

Examiner

Randall Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 122204;081006;102306.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Species 19 (Figs. 21a, 22a, 23a, 24a, 25a, 26a, 27a), claims 1-20, in the reply filed on 05 April 2007 is acknowledged.

2. Claim 2, indicated by Applicant as readable on elected Figs. 21a, 22a, 23a, 24a, 25a, 26a, 27a, is being withdrawn from consideration since claim 2 recites that the receiving member is provided with bristles, which is not disclosed for elected 21a, 22a, 23a, 24a, 25a, 26a, 27a.

Claim 18 (and claim 19 since it depends on claim 18), indicated by Applicant as readable on elected Figs. 21a, 22a, 23a, 24a, 25a, 26a, 27a, is being withdrawn from consideration since claim 18 recites that the receiving member has bristles, which is not disclosed for elected 21a, 22a, 23a, 24a, 25a, 26a, 27a.

Claim 20, indicated by Applicant as readable on elected Figs. 21a, 22a, 23a, 24a, 25a, 26a, 27a, is being withdrawn from consideration since claim 20 recites a crown gear rotatably supported in the hollow interior cavity and oriented such that the axis of rotation of the crown gear is perpendicular to an axis of rotation of the motor and the drive gear, the crown gear configured and engaged with the drive gear of the motor such that the crown gear completes one revolution for a number, from one to three, of revolutions of the motor, the crown gear including a first cam member extending from a face of the crown gear, the first cam having a center offset from the axis of rotation of

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the crown gear and a second cam member extending from a face of the first cam member, and the second cam member having an axis of rotation co-extensive with the axis of rotation of the crown gear, which is all not disclosed for elected 21a, 22a, 23a, 24a, 25a, 26a, 27a.

### ***Information Disclosure Statement***

3. In the IDS filed 22 December 2004, the **publication month** must be supplied for foreign reference **TW 26360** (#102 on p. 3 of 4). Accordingly, this reference has not been considered.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference numerals **84** and **86** as shown in Figs. 21a and 27a; Reference numeral **1429** in Fig. 24a

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be

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labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because in Fig. 22a, it appears that reference numeral **1451** (upper one) drawn to movable bristle carrier 1405 is incorrect. Note, there are two (2) occurrences of numeral **1451** in Fig. 22a, which should be corrected. Please also refer to p. 28 of the specification, second full paragraph, which **incorrectly recites** "static bristle carrier 1451".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

6. The disclosure is objected to because of the following informalities:

On p. 29, line 8, the recitation "to separate the nested bristle carriers pieces" is grammatically incorrect and awkwardly written.

On p. 30, lines 9-10 should be corrected since the "receiving member" is incorrectly designated as numeral 1417. Instead, the **protuberances** should be designated numeral 1417.

Appropriate correction is required.

### ***Claim Objections***

7. Claims 1, 8, 12, 16 and 17 are objected to because of the following informalities:

Claims 1, 16 and 17, the recitation "one or more static bristle carrier" and "one or more movable bristle carrier" is an alternative expression rendering the scope of the claims unclear since it is unclear what Applicant intends the claimed invention to be. It is suggested to change "one or more" to --at least one-- in all occurrences for clarity purposes. Applicant is respectfully requested in making these changes in **every claim** (including dependent claims) in which these phrases appear.

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Claim 8, line 2, it is unclear whether "separate channels" are referring back to the same "channels" set forth in claim 7, line 2. Any double inclusion of elements should be avoided.

Claim 12, "a protuberance" and "an aperture" should each be positively recited. Further, it is unclear where the "protuberance" and "aperture" are each located.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 4, 6-10, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 05-146314 (hereinafter Japan '314).

With respect to claim 1, Japan '314 discloses an electric toothbrush in Figs. 1, 9 and 10, for example, comprising a handle 1 at a first end of the toothbrush having a motor 40 disposed therein, a neck 6 extending from said handle comprising a receiving member at 33 at a second end of the toothbrush, wherein a plurality of carriers engage said receiving member, wherein said plurality of carriers 32a, 32b, 32c comprises one or more static carrier 32c and one or more movable carrier 32a, 32b, and wherein said one or more static carrier 32c and said one or more movable carrier 32a, 32b independently

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slidingly engage said receiving member, and a drive shaft 31 operatively connecting said one or more movable carrier to said motor.

As for claim 3, said carriers 32a, 32b, 32c comprise bristles 36.

As for claim 4, said carriers 32a, 32b, 32c are selected from the group consisting of static and movable carriers comprising brush head tips, static bristle carriers, or movable bristle carriers,

As for claim 6, said plurality of carriers 32a, 32b, 32c releasably engage said receiving member at 33.

As for claim 7, said carriers 32a, 32b, 32c engage said receiving member at 33 within "channels" (i.e., at least on sides of rails 35, for example) defined by a surface of said receiving member.

As well as claim 8 is understood, said one or more movable carrier 32a, 32b and said one or more static carrier 32c engages said receiving member at 33 within separate channels, as set forth above, defined by said surface of said receiving member.

As for claim 9, said one or more movable carrier 32a or 32b is deemed "nested" (i.e., just adjacent to one another) within said one or more static carrier 32c.

As for claim 10, said one or more static carrier 32c is retained on said receiving member by connectors defined by an "outer" (merely relative) surface of said receiving member at 33 matable with connectors defined by an "inner" (merely relative) surface of said one or more static carrier.



As for claim 16, Japan '314 also teaches a combination or "kit" comprising the toothbrush of Claim 1, as set forth above, and one or more carriers selected from the group consisting of brush head tip carriers, static bristle carriers, or movable bristle carriers.

As for claim 17, as stated above, Japan '314 teaches an electric toothbrush in Figs. 1, 9 and 10, for example, comprising a handle 1 at a first end of the toothbrush having a motor 40 disposed therein, a neck extending from said handle comprising a receiving member at 33 free of bristles at a second end of the toothbrush, wherein said receiving member receives a plurality of bristle carriers 32a, 32b, 32c to form a toothbrush head, wherein said plurality of bristle carriers comprise one or more static bristle carrier 32c and one or more movable bristle carrier 32a, 32b, and wherein said one or more movable bristle carrier 32a or 32b is deemed "nested" (i.e., adjacent) within said one or more static bristle carrier 32c, and wherein said one or more static bristle carrier 32c and said one or more movable bristle carrier 32a, 32b independently slidably engages said receiving member of said neck 6, and a drive shaft 31 operatively connecting said one or more movable bristle carrier to said motor.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan '314.

As for claim 5, it is the position of the Examiner that one skilled in the art would find it obvious to provide for a plurality of static bristle carriers as opposed to just a single static carrier in order to increase the number of bristles to vary brushing effect. Provision of a toothbrush with static and movable bristles is well known and merely adding the number of carriers (whether static or movable) is deemed well within the level of ordinary skill to vary brushing effect.

As for claim 11 reciting that said matable connectors further comprise serrated teeth, the provision of serrated connectors is well known in the art and obvious for ensuring a more secure fit or snap-fit.

As for claim 12, said one or more movable carrier engages said drive shaft 31 by receiving a protuberance 31a into an aperture.

As for claim 13, said one or more movable carrier 32a, 32b moves in a direction substantially parallel to said longitudinal axis of said receiving member of the toothbrush.

As for claim 14, said one or more movable carrier 32a, 32b reciprocates.

As for claim 15, said receiving member at 33 and said neck 6 of the toothbrush are a unitary body (Figs. 9 and 10).

**Conclusion**

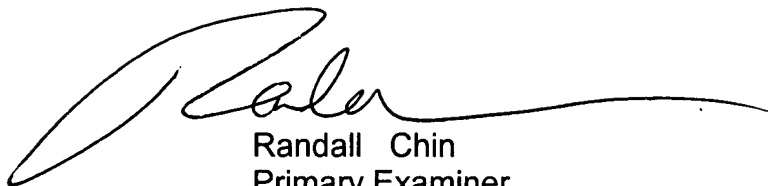
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Blaustein, Fattori, Eliav, and Gatzemeyer are relevant to various electric toothbrush arrangements.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The examiner can normally be reached on Monday through Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "Randall Chin", with a long horizontal flourish extending to the right.

Randall Chin  
Primary Examiner  
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